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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,600	12/23/2005	Dimitri Peter Zafiroglu	SWZ-018	6195
29626 7590 12/30/2008 THE H.T. THAN LAW GROUP WATERFRONT CENTER SUITE 560 1010 WISCONSIN AVENUE NW WASHINGTON, DC 20007				
EXAMINER				
MATZEK, MATTHEW D				
ART UNIT		PAPER NUMBER		
1794				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,600

Applicant(s)

ZAFIROGLU, DIMITRI PETER

Examiner

MATTHEW D. MATZEK

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-48 and 50-55 is/are pending in the application.
- 4a) Of the above claim(s) 41, 48 and 50-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39, 40, 42-47, 54 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. The amendment dated 10/16/2008 has been fully considered and entered into the Record. Claims 39-48 and 50-55 remain pending, with claims 41, 48 and 50-53 withdrawn from consideration. Claims 39, 40, 42-47, 54 and 55 remain active. No claims have been amended in the latest amendment.

Response to Arguments

2. Applicant's arguments, see Remarks, filed 10/16/2008, with respect to the rejection of claims 39, 40, 42-47, 54 and 55 made in view of Sidles along with additional secondary references have been fully considered and are persuasive. Therefore, the previous rejections have been withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 39 and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu (WO 01/40563 A2).

a. Zafiroglu discloses a method of making a composite material comprising selecting a primary backing layer **P** having a top and bottom surface, which is then punched through a tufting process to form a plurality of legs extending away (page 4, lines 11-35) from the top surface of the face layer (the lower side of **P** in Fig. 1). The combination of the primary backing layer and the tufted fibers form the claimed fibrous face layer. An adhesive layer having top and bottom surfaces may be applied in direct contact with the bottom surface of the bottom layer (page 6, lines 3-21) and may be

applied prior to tufting (abstract). The application of heat causes the binder to shrink, soften and coalesce toward the tufted needle points of insertion (page 6, lines 22-30). This process allows for the binder to penetrate the fibrous face layer (Fig. 2B). The top surface of the fibrous face layer remains substantially adhesive free. The tufting process punches the legs of the fibers into the adhesive layer (page 4, lines 25-35).

b. Zafiroglu fails to explicitly disclose the depth in which the adhesive layer penetrates the fibrous face layer. The relative depth in which the adhesive layer penetrates the fibrous face is a result-effective variable affecting the strength and stability of the composite (page 6, lines 3-22). Consequently, absent a clear and convincing showing of unexpected results demonstrating the criticality of the impregnation depth, it would have been obvious to one of ordinary skill in the art to optimize this result-effective variable by routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

c. The adhesive layer is activated by the application of heat and pressure (page 7, lines 3-16 and 30-35). The applied reference fails to explicitly state that the pressure is applied to the top surface of the face layer, but it would have been obvious to one of ordinary skill in the art at the time of the invention as it would assist in adhesive integration into the composite. Claim 44 is rejected as an additional backing layer may be placed in direct contact with the bottom surface of the adhesive layer (page 7, lines 30-38).

4. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu (WO 01/40563 A2) as applied above to claim 39, and further in view of Sidles (US 4,888,228).

Zafiroglu fail to teach or suggest the plurality of legs comprising free fiber ends at the bottom surface of the fabric face layer.

- a. Sidles discloses a composite laminate comprising a woven ground cloth **22** (Fig. 3) having a top and bottom side (col. 2, lines 7-15). The ground cloth further comprises tufted fibers aligned substantially normal to **22**. The ends of the tufted fibers may form tips **36**, which are free fibers ends as the bottom of the surface of the fabric face layer.
 - b. Since Zafiroglu and Sidles are from the same field of endeavor (i.e. tufted composites), the purpose disclosed by Sidles would have been recognized in the pertinent art of Zafiroglu.
 - c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Zafiroglu with the plurality of legs comprising free fiber ends at the bottom surface of the fabric face layer with the motivation of improving the composites structural integrity as disclosed by Sidles (col. 2, lines 34-45).
5. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu (WO 01/40563 A2) as applied above to claims 39 and 44, and further in view of Schmiedel (US 1,798,277). Zafiroglu fail to teach or suggest the needle-punching of the fiber legs through the adhesive layer and into the backing layer.
- a. Schmiedel discloses a hooked rug (col. 1, lines 11-14) that comprises multiple backing layers **12** (Figure 5) that are stitched together with the fibrous face layer of the rug for dimensional support (col. 2, lines 55-77).

- b. Since Zafiroglu and Schmiedel are from the same field of endeavor (i.e. tufted flooring), the purpose disclosed by Schmiedel would have been recognized in the pertinent art of Zafiroglu.
 - c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Zafiroglu by stitching the face layer through the adhesive layer to the backing layer with the motivation of providing additional dimensional support as disclosed by Schmiedel (col. 2, lines 55-77).
6. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu (WO 01/40563 A2) as applied to claim 39 above, and further in view of Murata et al. (US 4,576,840). The disclosure of Zafiroglu is silent as to the stitch-bonded and bulked fabrics made of shrinkable yarns in the fibrous outer layer.
- a. Murata et al. teach a pile fiber composition comprising shrinkable pile fibers in the creation of a woven or knitted pile fabric (abstract).
 - b. Since Zafiroglu and Murata et al. are from the same field of endeavor (i.e. fabric composites), the purpose disclosed by Murata et al. would have been recognized in the pertinent art of Zafiroglu.
 - c. It would have obvious at the time the invention was made to a person having ordinary skill in the art to modify the Zafiroglu carpet with tufts of shrinkable fibers motivated by the use of conventional techniques within carpet making with the desire to create an article with outstanding appearance and feel (Murata et al. Abstract).

7. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu (WO 01/40563 A2) as applied to claim 39 above, and further in view of Bohrn (US 3,830,683).

Zafiroglu fails to teach or suggest the embossment of the tufted carpet.

- a. Bohrn discloses a process for embossing tufted carpet to improve its appearance (abstract).
- b. Since Zafiroglu and Bohrn are from the same field of endeavor (i.e. tufted carpet), the purpose disclosed by Bohrn would have been recognized in the pertinent art of Zafiroglu.
- c. It would have obvious at the time the invention was made to a person having ordinary skill in the art to emboss the Zafiroglu carpet with the motivation of improves its aesthetics as set forth by Bohrn (col. 2, lines 7-26).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571.272.1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Examiner, Art Unit 1794